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Engineering

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OFFICIAL PROCEEDINGS

Meeting of December, 1921

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Volume XX
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OCTOBER
1913

Canadian Railway Club

MONTREAL

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CONTENTS

Report of December Meeting and paper and discussion

on

"The Difficulties of Railroad Transportation in Soviet Russia."

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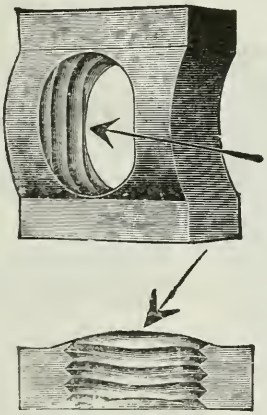

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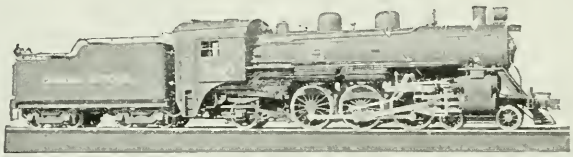

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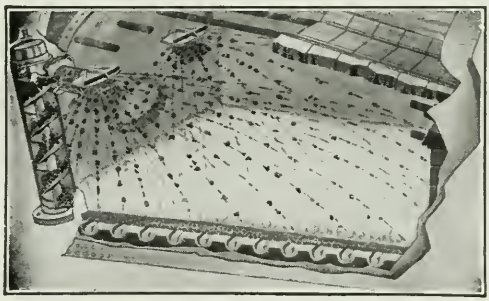

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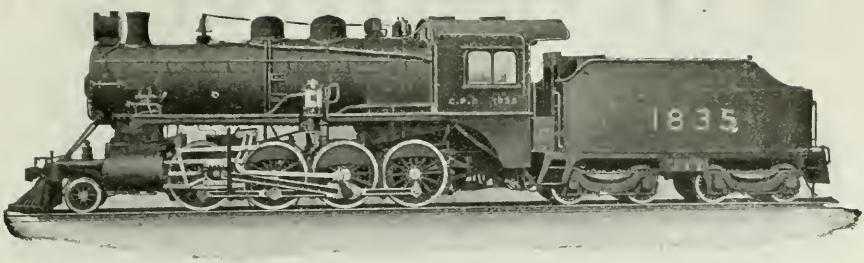

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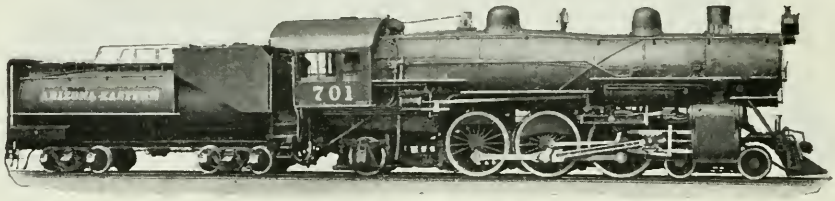

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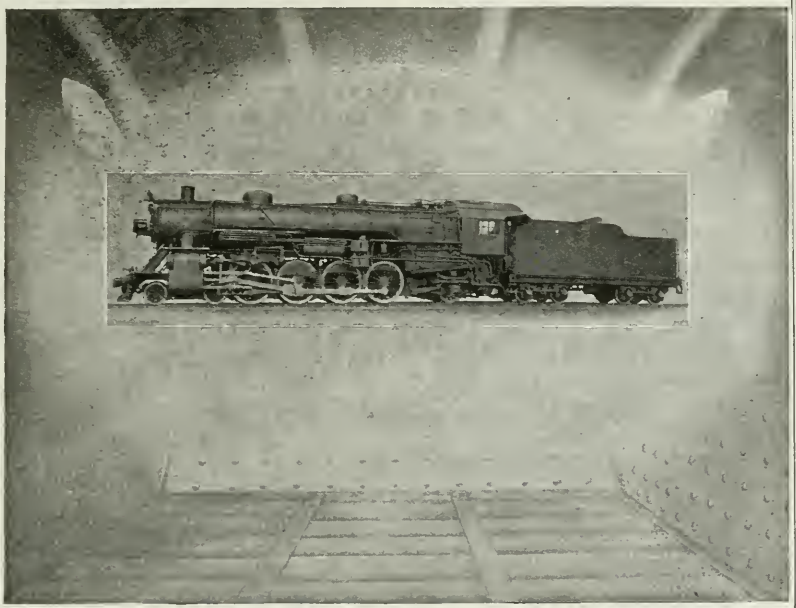

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W. A. BOOTH, Secretary, 53 Rushbrooke Street, Montreal.

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PROCEEDINGS OF THE CANADIAN RAILWAY CLUB

Windsor Hotel,
Montreal, December 13, 1921.

Chairman (Mr. A. Crumpton):

Gentlemen, the usual attendance cards have been placed on the chairs, and I will ask that everyone here sign one, so that our record of attendance will be complete.

MEMBERS PRESENT.

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Abbott, E. W.
Allan, T. A.
Ambrose, J. R. W.
Andrews, B. W.
Bailey, T. C.
Barber, H. H.
Barclay, W. M.
Barker, H. H.
Barrett, C. W.
Benger, F.
Bergen, F.
Blackburn, W. J.
Boughton, S.
Boyd, G.
Branston, W.
Brennan, T. P.
Broaderup, M.
Broderick, C.
Brooks, P. T.
Buckland, J. W.
Burke, J. M.
Carmichael, C.
Carmichael, F. W.
Carrigan, W. J.
Carter, J. W.
Carter, W.
Chown, T. C.
Clark, F. M.
Clark, H. A.
Clibbon, A. T.
Coffey, J.
Coffey, W.
Col, D. W.
Cookman, R. C.
Cowap, W.
Crawford, R.
Crockett, W. B.
Crutchlow, G.
Daniels, H. E.
Desparois, D.
Doherty, H. J.
Doherty, W. A.
Duggan, H. V.
Dunn, G. W.
Eaton, J. W.
Emslie, T.
Emblem, A. E.
Emblem, J.
Evans, W. E.
Ferguson, F.
Ferguson, T.
Fielding, W. G.
Forbes, J.
Foster, A. C.
Fradel, F. J.
Fradd, F.
Fraser, J.
Gardner, K. V.
Gellmor, W. D.
Gigg, T.
Going, A. S.
Goldstraw, W.
Goodenough, A. J.
Gordon, S.
Gosling, A.
Gosling, L.
Grange, W. F.
Guest, A.
Griffiths, J.
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Halton, W.
Hanson, L. J.
Hanson, P. R.
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Harrison, J.
Hassall, C.
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Hyman, W. J.
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Ivory, D. M.
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Jones, H. G.
Jarman, T. L.
Jarman, W.
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Kell, G. A.
Kennedy, J. W.
Kennedy, R.
Kenny, A. L.
King, A.

Lamont, T. D.
La Montagne, C. E.
Lamoreux, D. P.
Lepage J. S.
Linwell, V. A.
Lowe, W. S.
MacKelvie, R. S.
Mackie, R. L. D.
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Pendergast, J.
Pepper, A. H.
Perrett, C. F.
Peverley, R. D.
Phillips, F.
Pierpoint F. H.
Piper, H. L.
Playfair, J.
Poor, E. O.
Pope, A.
Powell, J.
Prevost, L. E.
Prouse, W.
Reynolds, P.
Riddington, A.
Robb, G. W.
Robb, J. D.
Rosevear, W. H.
Ross, J. D.
Ross, N. E.
Rough, J. C.
Royer, C.
Russell, G.
Sampson, R.
Serchuck, H. W.
Shaw, J. D.
Shortley, B. T.
Simpson, J. A.
Simpson, J. A., Jr.
Sleigh, T.
Smeaton J. N.
Smith, J. L.
Spalding, E. C.
Spence, W.
Spry, S. H.
Starkey, J. B.
Stranger. R.
Stuart, H. B.
Tate, W. F.
Taylor, J.
Taylor, S. G.
Theobald, E. G.
Thorburn, C. D.
Tinkler, C.
Tinkler, J. E.
Towne, A. C.
Trindall, D.
Underwood, G.
Vincent, E.
Webb, W. C. H.
Wickson, F.
Weir, F.
Westren, J.
Wiliams, C. R.
Wilson, G. M.
Wilson, G.
Winship, S. B.
Winterson, J. W.
Yost, W. H.
Booth, W. A.

AND OTHERS.

Chairman:

We will dispense with the reading of the minutes of last meeting, as the proceedings containing same have been mailed to all members. Our Secretary will now announce the new members.

Secretary:

The following applications have been received since our last meeting:

NEW MEMBERS.

Baker, Wm. H., Draftsman, Canadian Car & Fdy. Co., Montreal.
Bladon, J. R., Machinist, Car Dept., C.P.R., Montreal.
Bondy A., Loco. Paint Foreman, C.P.R., Montreal.
Campbell, N M., President, Engineering Equip. Co., Montreal.
Dutton, H. R., Machinist, C.P.R., Montreal.
Flora, G., Rail Inspector, G.T.R., Durand, Michigan.

Garden, J. C., Gen. Supt. M.P. & Car Depts., G.T.R., Montreal.
Hopperton, L., Junior Draftsman, C.P.R., Montreal.
Kierans, H., Chief Electrician, Canadian Car & Fdy. Co., Montreal.
Luker, G., Asst. Foreman, Loco. Dept., C.P.R., Montreal.
Melville, Wm., Contract Foreman, C.P.R., Montreal.
McClure, W. C., Asst. Loco. Foreman, C.N.R., Moncton, N.B.
McKechnie, F. H., Vice President, Engineering Equip. Co., Montreal.
Neale, G., Clerk, C.P.R., Montreal.
Potts, J. F., Clerk, C.P.R., Montreal.
Reynolds, W. R., Salesman, Taylor & Arnold Eng. Co., Montreal.
Roberts, W. H., Foreman Boilermaker, G.T.R., Montreal.
Ryan, J., Car Department, G.T.R., Montreal.
Robertson, J. A., Gen. Manager, Beldam Asbestos Canada Co., Montreal.
Sealy, W. C., General Foreman, G.T.R. Shops, Stratford, Ont.
Serchuck, H., Clerk, Piece Work Dept., C.P.R., Montreal.
Stranger, R. Robt. Mitchell Co., Ltd., Montreal.
Taylor, J., Clerk, Gen. Fuel Dept., C.P.R., Montreal.
Ward, G. M. T., Sec. to Mech. & Slec. Eng'n., G.T.R., Montreal.
Watkinson, A., Machinist, Car Department, C.P.R., Montreal.
Will, J., Boilermaker, C.P.R., Montreal.

Mr. Norman Holland:

Mr. Crumpton has asked me to speak to you in connection with our Annual Banquet. This is to be held in the Windsor Hotel on January 28th, at 7.30 o'clock.

You will recollect that in years past we have had considerable trouble owing to the fact that so many of the members did not make up their minds whether they would attend or not, until the last minute. We not only have to guarantee the hotel a certain number, but we also have to be sure that provision is made for as many as intend to be present. In past years, there has always been a large rush of members at the last moment, and as a consequence there has been a certain amount of hard feeling because they were not provided for. Members are entirely to blame for this, as neither Mr. Booth nor myself are mind readers. Tickets will be on sale at the January meeting, and the price will be the same as last year, viz., $3.00. Mr. Booth will be prepared to take the names of the members who want table reservations, and you should let him know whether you want a table for six or eight. Much dissatisfaction has been expressed in previous years owing to members not getting reservations which they claimed they had provided for.

Only Mr. Booth has the table reservations in hand, and he must be notified personally. The member must then see to it that he is there on time to take possession of

his table, as reservations cannot be held, owing to the fact that there are always a lot of members who turn up without having provided for accommodation.

There is no reason why the present dinner cannot be made as big a success as all previous ones have been, but whether or not each individual receives the attention he thinks he should get, depends entirely upon himself.

Chairman:

We are to hear something of Russia to-night, and are very fortunate in having with us Mr. E. A. MacMillan, Superintendent of the Atlantic City and Shore Railroad. He is going to give us first hand information on Russia, and during the reading of the paper, if any questions at all occur to you, anything that you would like to have cleared up, if Mr. MacMillan can possibly clear them up after the paper has been read, he will be only too pleased to answer any questions put to him. I have pleasure in introducing Mr. MacMillan.

Mr. E. A. MacMillan:

Mr. Chairman and Gentlemen: I feel highly honored at being your guest to-night, and am glad to be in a position to give a short talk on present day conditions in Soviet Russia. You will note by your program that the title of this paper is "The Difficulties of Railroad Transportation in Soviet Russia." Now first of all I want to tell you that I think it is very clever of me to choose that title. It gives me an opportunity to talk about almost anything in Russia, and it will still pertain to the subject, so I hope you won't mind if I take the liberty to digress slightly from the text of this paper and with your permission I shall speak at random on several phases of the Russian situation as I saw it during the two years I spent there.

The subject is so vast that I can not hope to do it justice in the short time I have available, but I shall deal with several branches of it and leave it to you to ask for an elaboration of any particular detail that you might care to hear more about. Frankly I do not anticipate any difficulty in telling you some things that may interest you despite the fact that I have come several hundred miles to be your guest to-night without any very clearly defined idea of what I am going to talk about. I might say that I do not know very much about railways; I only use them in earn-

ing a living, and the longer I lived in Russia, the more I was convinced that I did not know very much about it. One of the reasons that I do not care to adhere very closely to the paper is that during the Electric Railway Convention in Atlantic City a few months ago, I attended some of the sessions to hear the various very splendid papers that are prepared by the delegates. They were almost invariably read in a dreary monotone that convinced many of the audience that the more interesting place was out on the boardwalk. I soon returned to my office, where I found the several papers on my desk, and they were read at my leisure.

We have all heard of Russia, but there are very few of us who know very much about it. Before I went to Russia I thought of it as an enormous blotch of printer's ink that smeared itself across the map of Europe, and the greater part of Asia, and that it was a country of Cossacks, caviar, vodka, wilderness, Siberian winters,, secret police and salt mines. I might say that many of my impressions were correct, but to get a proper perspective on the Russian situation one should know something of the enormities and magnitudes of the country, and its population as well as some of the conditions that led up to the present state of affairs.

In this country and on this continent we pride ourselves upon knowing something about magnitudes and distances, in contradistinction to some of the smaller countries of Europe. Russia had an area several thousands of square miles greater than the area of the continent of North America. And some of you may be surprised to know that there are distances within what was the former Russian Empire that exceed the distance between Montreal and Petrograd. If I were to tell you that I am leaving for Petrograd to-night, and would say, "He is going a long distance, and will be gone a long time," but it was a common thing for people to depart from European Russia for Siberia and be gone for the rest of their lives.

Spread over this enormous area there was a greater population than on the whole Western Hemisphere. There were between 170 and 180 million people, although it is doubtful if there are more than 150 million at the present time. A great number of them have died from the war, disease, cold and hunger, and a great many more are going to die. Of these countless millions of people there were about 90% who could not read or write. About 125 mil-

lions were peasants, and the peasants were almost totally illiterate. They live in the great open spaces like animals in the wilderness, and are almost self sustaining in every respect. They grow their own food, make their own clothes, and through their own efforts obtain whatever other comforts of life they can from the primitive conditions about them. They know nothing about geography or politics, neither do they care, and their one great desire is to possess enough land to permit them to live in comfort.

I mention these things so that you may have some idea of the relation of this human quagmire to the National Life of Russia. I hardly need to add that in a country of so great an area and with so large a population, the railroads—or the lack of railroads—must constitute one of the most important factors in the progress of the country. In fact, one of the great retarding elements to Russia's advancement, down through the centuries until the present day, has been the lack of intercommunicaiton. I mean transportation, telegraphs, postal services, newspapers and all the elements that promote the association of ideas; of which the railroad is by far the most important (applause).

Russia did not commence her policy of railway construction until comparatively late, and she was thereby in a position to profit by the experience of some of the other countries which were the pioneers in the industry. I remember when I was a very young lad I heard a sermon in which the minister, to illustrate some detail in his sermon, told the story of the plans of the St. Petersburg-Moscow Railway, which were submitted to the Emperor Alexander by the Engineers, who could not quite decide upon the route, and of how the Czar drew a straight line on the map to join the two cities with the dictim to the Engineers that the road be constructed thus, regardless of obstruction or difficulties. The story naturally acquired a few romantic embellishments as time went on, but as a matter of fact the Petrograd-Moscow Railway does not follow an absolutely straight line, although the country is very flat between Petrograd and Moscow. So the question was really whether the railway should twist and turn out to accommodate the numerous villages, or whether the villages should move up to the railway. Experience has since demonstrated that the autocratic order of the Czar was good judgment. Gradually they built up quite a network of railways that radiated from Petrograd and Moscow to most parts of European Russia. Eventually the Ural mountains

were crossed, and a few years later the Trans-Siberian System was built.

I can imagine many of you saying to yourselves: "Let me see, weren't the Russian Railways State controlled?" And I can assure you at the outset that they were and still are. Under the Imperial Regime, the railways of Russia enjoyed the reputation of ranking among the world's great transportation systems. Under the Bolshevik Government they were naturally one of the first items to fall under the nemesis of "Nationalization." At this point I should like to differentiate between government ownership and the insidious institution of able Soviet Government known as "Nationalization." And I hope to be able to let you see why I felt that the subject of this paper must of necessity be very closely linked with the policies and practises of the Russian Soviet Government, so you will understand if I embellish the subject with some extended remarks on the political situation.

Among the improvements decided upon in the construction of their railways was the adoption of the five foot gauge which permits of heavier equipment, both for passengers and freight. Sleeping cars can obviously be made more comfortable. The freight cars at first were the small single truck type of ten tons capacity, without air-brakes and linked up by the nasty little hair-pin couplers, the same as those used on the English system. The adoption of this type of car was obviously a mistake in a country that has so much bulk freight as grain, coal, lumber and oil. Latterly, however, the freight rolling stock has been made much heavier and now there are to be seen a great many of what the Russians call "American box cars." These are even heavier and of a greater capacity than those in use on this continent.

The first class equipment was not exceeded by anything in America or Europe for comfort or luxury. There were four classes of passengers besides the coolies, who were really freight. The locomotives were Russian, German, French, Belgian, Swedish, English and American. Their own engines were very good, and their mechanics could do very fine work, although unaided by all the modern shop equipment that is used on our own roads. In fact it was generally conceded that in operation they had very little to learn from the various missions that were organized to assist them. The one outstanding feature that I noticed was the lack of wrecking equipment. I saw dozens of very

serious wrecks, but did not see a modern wrecking crane in the whole of Russia. Dozens of locomotives and hundreds of cars are still in the ditch from wrecks that occurred months and even years ago. I remember one occasion in which a locomotive broke through a culvert. They simply raised the grade and put in a few carloads of ballast so that the track could be built over the prostrate engine. Probably their instinct for revolutions and reversals of conditions prompted them to decide that turn about was fair play, and that it was time the track had the upper hand over the locomotive. No doubt they intend to come along and rescue much of the rolling stock that is now hors de combat, but that probably shan't be until the government changes for the better.

The bridges and tunnels were designed for greater loads and head gauge. Curves and grades were highly disciplined, and in all a very substantial road was built. The rail section is much like the A.S.C.E., in fact the road bed is the American type.

You have all heard of the Trans-Siberian. It is a wonderful system of co-ordinated units which stretches from Vladivostok on the Pacific coast of Asia to the Ural mountains and beyond, where it links up with the network of lines which radiates from Petrograd and Moscow in European Russia. It is a double track system as far as Omsk, where it diverges—one branch goes north to Ekaterinburg and the other south to Cheliabinsk. Each unit is named after the region through which it travels.

What is known as the Trans-Siberian proper, however, stretches from Cheliabinsk on the Ural mountains to Chita near the boundary line of Manchuria. From Chita a short branch connects up with the Chinese Eastern Railway, which traverses Manchuria and again connects with the Russian System at Podgranitza on the eastern boundary of Manchuria, for Vladivostok.

Manchuria, of course you know, is really Chinese territory, although the Japanese have it in their sphere of influence, and there are a great many Russian residents there. The Chinese Eastern Railway was built by French capitalists through concessions obtained from China by influential Russians. The road in itself was never a paying proposition, although several of the subsidiary privileges were very attractive to the Concessionaires. At Harbin it connects with the branch to Chang Chun—the junction with the Japanese line which in turn connects with the

Chinese State Railways entering Tien Tsin, Peking and Shanghai. You will note that although the Chinese Eastern Railway affords the shortest route between Vladivostok and the Trans-Siberian proper, still it is not in Russian territory. Accordingly, for strategic reasons the Amur Railway was constructed to detour Manchuria to the North. It makes the trip much longer, but it traverses Russian territory all the way. The Amur should really be considered a military railway.

The Trans-Baikal traverses a very picturesque region, much like the Lake Superior District in Canada, with many mountains, lakes and tunnels. It skirts the Southern shore fo Lake Baikal. Formerly the trains were ferried across the lake in summer, and the tracks were laid on the ice in winter; hence the name of the railway. This practice was later abandoned, however, when the present rout was, after great difficulty, constructed to detour the lake to the south. Farther West the Tomsk and then the Omsk Railways serve the more gently undulating territories bordering on the Siberian Steppes.

The ascent of the Urals is made very gradually, and no great mountain peaks are seen. Across the line, one side of which is Europe and the other side is Asia, the country is thickly wooded and the descent makes it necessary to keep the brakes applied for about twenty miles. The Trans-Siberian came into prominence at the time of the Russo-Japanese War, and thanks to it, Russia was enabled to transport troops and supplies and carry on a war five thousand miles from her base.

I have already given you a rough idea of the population and area of the country, and at this point I should add that Siberia alone has a much greater population than Canada, and her millions of square miles are served by this one artery of transportation with almost no branch lines. Naturally the population groups itself near the railways, and as a matter of fact a great number of them earn their living, either directly or indirectly from the railway. Of course that statement holds true for almost any community, and only emphasis what a necessary back-bone the railway is to any country. Perhaps I should explain that of the 10 million inhabitants of Siberia, the greater number are members of the nomadic tribes who form some of the off-shoots of the Mongolian invasion of the 13th Century.

When the world war started Russia was the first in the field of combat against the slimy tentacles of the German

octopus. All her internal resources were taxed to the utmost to do what she could against her highly organized adversary. We read the newspaper accounts of the Russian steam roller and the millions of soldiers who had advanced at the order of the autocratic Nikolai. At the time we did not know that those soldiers were unarmed and many of them had no shoes on their feet. They died by battalions in a hopeless effort to defeat their enemy with bare hands Neither did we know that the other resources of Russia and her internal organization were equally chaotic. She was the greatest illusion in the world at that time. She knew that she could not conduct a war without riffles and railway equipment and she ordered enormous quantities of it from America and wherever else she could get it. We remember the Canadian Car and Foundry Co. sending her box cars. I saw many of them in Russia. The Baldwins sold her locomotives and I saw dozens of them dead on side of tracks across six thousand miles of steel rails. The Russian seems absolutely incapable of maintaining order; it was easier to order new locomotives than to repair the old ones. The war placed a tremendous tax on her railways. She had those millions of soldiers to transport along with their artillery, cavalry and supplies. I will say, however, that her effort was magnificent. She made up a great many very fine hospital trains and in transporting troops it was marvellous how quickly they could load up a brigade of Cossacks and depart for the front,—the last horse or two sometimes compelled to mount a flat car after the train had commenced to move. The war of course, piled up a staggering amount of deferred maintenance which increased with an accumulative effect as time went on. The track and roadway naturally came off better than the rolling stock.

You will appreciate that these conditions were reaching the culminating point after the centuries they had been crystalizing down through Russia's tragic history. There were the elements of geography, climate, race, temperament, religion and government, that contributed their forces to this reaction. There was always an undercurrent of revolution in Russian affairs. The reason I shan't stop to analyze. There was the autocratic government, and there was the ungovernable spirit of the people. I shan't say which was cause and which was effect. But I do know that there has since been a revolution and the new government is infinitely more autocratic than any former institution of the Czars.

After the Crimean War the Czar Alexander III. decided upon the emancipation of the serfs. The serfs were the peasant laborers on the farms of the great land-owners. They lived in their villages and supplied the labor for tilling and harvesting the crops. The landlords were responsible for their subsistance. It was arranged that the serfs, upon being set free, should be given a small parcel of land from the land which he had formerly cultivated for the wealthy owner. The government paid the landlord for the land, and in turn sold it to the peasant on a long term payment system. It developed that the farms were each too small to permit the former serf to make a decent living, and his purchase payments often exceeded his gross income. He was usually in arrears, and feared to purchase the necessary implements less they be confiscated by the government. You can imagine what an unsatisfactory state of affairs this engendered in a country with such a high percentage of peasants.

When the Russian Army suffered defeat at the arms of the Japanese, there occurred what is known as the unsuccessful revolution of 1905. It was speedily suppressed by the Army. It was then that the Czar Nicholas II. conceded the Imperial Duma. The word Duma is from the Russian verb "to think," and I might add that the Duma could only think. It had no right to voice its thoughts if they differed too radically from the Imperial requirements. The Duma had no authority either legislative or executive, and was dissolved at will by the autocratic Nikolai. It was a poor, false sham of a democratic institution and at best was only a talking shop.

Many of the revolutionaries were exiled. Among these was Nikolai Lenin, who went to London and later to Switzerland, where he fathered the Bolshevik party. The main idea of the Bolsheviks was "Revolution by violence," and the establishment of an absolute dictatorship over the inhabitants of whatever country should be favored by the advent of Bolshevism. Lenin believed in the ruthless extermination of all capitalists as the shortest cut to prosperity. Briefly speaking, he was a communist and an ardent believer in the doctrines of Carl Marx, with the added belief that he was the anointed of God who must instil these gentle advantages into the poor down-trodden proletariat of Russia and the world, I should add.

And now you can easily see that after the World War

once got nicely under way, it was the most natural thing imaginable that the revolution should have broken out. The nation, individually and collectively, was saturated with incompetence and chaos. Ivan on the battle front was tired, cold and hungry, so he simply turned about and stumbled blindly homeward.

When the Revolution occurred, things were naturally in a frightful mess. Active participation in the war had ceased but there was still the ebb and flow of that human quagmire, without the constructive element so necessary at that time. Conditions went from bad to worse under Kerensky until the Bolshevik revolution in the autumn of 1917. And at this point History was furnished with a classic example of the irony of Fate. At the one moment in Russian Affairs when the healing hand of reconstructive genius was required as never before, there arrived on the scene Lenin and Trotsky who ushered in the diabolical pestilence which has since cast Russia under its searing blight. Many will say that Bolshevism was the result of the unfortunate conditions that existed before the revolution. But Bolshevism could never have been instituted without the help of Lenin, Trotsky and their Colleagues who had waited their chance for years and had seized upon the time when Russia was paralyzed and helpless to promise their poppy-colored paradise to a people who would clutch at any helping straw.

Bolshevism is the wildest radical socialism. The primary plank in its platform is government by violence. While they promised the millenium they declared that first they must destroy the existing social system. This they immediately proceeded to do. The next decree of the Bolsheviks was the abolition of private property, which meant universal State ownership. This order was absolute and included everything from a man's earning capacity to his horse or his house. Even his children were the property of the State.

And through all this I hardly need to remind you that the railways were still one of the country's greatest assets. one by one the industries of the country faltered and perished from lack of organizaion. Initiative and incentive had been stifled in the individual and the government was incapable of assisting the situation. The mines closed down and later the factories. The peasants refused to grow food to be confiscated by the government. All efforts were spent on keeping the Red army intact and on keeping the slowly stagnating railways from death. The conditions were not helped by the various so called White Guard Armies that

were organized to combat the Reds. It only produced Civil War within a country that was already ruined by War. If anything it produced greater cohesion within the ranks of the Red Army. The Czecho-Slovaks, the Poles, Kolchak's Army, Denekin's Army and the innumerable partisan bands only added to the confusion. The Inter-Allied Missions of assistance were very little better. The first thing they all did was requisition comfortable trains for their own use. Thousands of box cars were used for dwellings by soldiers and refugees. Hundreds of locomotives were side tracked for the want of some triflling repairs.

The British Railway Mission to Siberia had good intentions but it only applied external balm to a very deep seated condition. It went to assist Admiral Kolchak and received the thanks that is usually accorded to an individual who interferes in a family quarrel. During the year that Kolchak held Siberia there was hardly a day that there was not an attack of some kind by Bolshevik bands on some part of the railway. I personally remember one trip on the International Express de Luxe upon rounding a curve on a high embankment west from Vladivostok, the engine left the rails and the sleeping cars tumbled over on their sides. We found that the spikes and joint bars had been removed from the outside rail so that by all calculation the whole train should have gone over the precipice. It seems that the engine anchored in the roadbed and held the train intact. The military operations of the Reds and the Whites that summer were purely confined to the railway. When an advance was in order, the Railway battalions were the pioneers who went ahead and rehabilitated the track and the Army followed to see how much equipment they could capture. When it was decided to retire, the railway battalion tore up the switches and other special work and loaded them on their train as they moved off as the rear guard. This pleasant position proceeded until late in the autumn when the Reds made a concerted attempt to follow up their advance as they were much in need of locomotives.

When it was evident that the capital of Siberia must be abandoned the congestion was very discouraging. An attempt was made to allot railway accomodation to families who wished to evacuate the city and for days there was an incessant flood of transport through the streets en route to the Railway Station. Thousands of refugees were huddled together in poorly heated freight cars while the snows of the approaching Siberian winter were already whirling about.

Many of these people were to die before they had travelled another thousand miles. Trains were dispatched eastward at the rate of about twenty-five daily, until it was decided to use both tracks for the traffic in the same direction. Later they were permitted to move in a ribbon within sight of each other. This practice obviously soon led to confusion as the Commandant of each train became his own dispatcher and ignored semaphores and all instructions from the different station masters. Later it became one wild scramble to escape. The Poles had seventy-five trains to evacuate from Novonicolaevsk and they seized all the available engines. They did not hesitate to commandeer a better one whenever possible. When one engine died on the road it of course delayed the whole ribbon behind it. All hands were pressed into service to carry snow or break up snow fences so that enough steam could be raised to permit the train to move off. In ascending grades the locomotive of the following train came up and acted as a pusher. If the two were still insufficient, the train was opened and enough cars were tumbled over the bank to make the train light enough to move. I was in a box car with thirteen Persians, two of whom had typhus fever. I remember one bitterly cold morning upon looking back from an eminence there could be counted eighteen trains as they emitted high jets of exhaust steam in their frantic efforts to make another verse or two. At every station could be seen abandoned trains and their late passengers endeavoring to escape anywhere eastward across the frozen wilderness. It was necessary to carry snow to supply the engine about every two hours and our daily travel was about thirty miles. We kept that up for about six weeks and we were still over a thousand miles from anywhere. Before Atchinsk there was a little longer delay than usual and upon investigation we found that a train load of ammunition had exploded in the midst of twelve refugee trains on parellel tracks. About fourteen hundred died either from the explosian or the fire that followed. They were luckier than the injured who still lived and could not get medical attention.

Conditions steadily became worse, and sabotage was rampant. Water towers were found destroyed, holes were punched in tender tanks, roundhouses were burned and very impediment was placed in the way of escape from the Bolsheviks, who followed on relays of horses. Week after week we continued our eastward flight. Christmas came and passed unnoticed. We lost track of the days. One member of the party made a calendar, but lost a day

in the attempt. There was a dispute when New Year's eve was due, but wed idn't much care.

One afternoon, while watching from our coupé windows, the interminable stream of transport that wended its way eastward like a black thread on the white tablecloth of snow a mile or so to our right, we were surprised to see a squadron of cavalry advance and burst through the line like a storm cloud. Everything blended into a grey mist of confusion, but we were only mildly interested. We were very impatient to reach Krasnoyarsk, where we hoped to find comfort and accommodation to Vladivostok. Soon a Russian soldier entered our carriage. He wore a British Army tunic, but had a red cap and red breeches. His tunic was also festooned with red ribbons and red rosettes. He announced, "We have come." We replied, "Welcome to our city," but it was not for several seconds that we realized that we had been made prisoners of war by the advance guard of the Red Army, and must now answer to the Russian Socialist Federated Soviet Republic. The "Red" soldier remarked that we would be pleased to know that they had just received an order from Trotsky to the effect that they were not to shoot any more foreigners. We assured him that we were more than pleased and asked to see his Colonel. He replied "Every soldier is his own colonel in the Red Army." He told us that we would be taken to Moscow and sent to a college to learn Bolshevism. Later we should return to England, where we should preach the divine essence of meekness to the English proletariat. We were told that we must evacuate our train, and were very lucky to find quarters in the town, where we spent the next three months in the depths of the Siberian winter, in the midst of a Typhus epidemic, in which men, women and children died about us like flies. We considered a bit of horse meat a great delicacy.

As the Reds advanced they naturally left the trains on the tracks where they stood, until they could have time to straighten out traffic. The Czecho-Slovak troops had their military echelons ahead of us, and they put up quite a stiff fight. They thought it necessary to destroy a few bridges behind them, but there are very many damaged bridges as a result of the civil war up and down Siberia. You of course know that the rivers of Russia run mostly north and south. There are some very fine bridges over the Amur, the Angara, the Yenisei, the Irtish, the Volga, and several others that I do not remember off hand.

When the Reds had consolidated their advance in Siberia, the first thing necessary was to get the railways working again. So they put everybody to work—including women and old men—to clear the snow from out the railway yards. They had not captured as many locomotives as they had hoped to do and they had great difficulty in getting any repairs done. It is one thing to Nationalize a man's labor and another thing to get him to do effective work. However at the end of two months they got a few trains moving and I with several others of the same party were instructed to be ready to go to Moscow. We got settled in our car and the train commenced to pull out when it was stopped and our car was switched off onto a side track where it remained for another month before instructions were again issued to send us out but this time it was to the east insead of west. They told us we were going to Shanghai via Vladivostok. In our trip east we saw many of the bridges that had been destroyed and they were now being repaired with timbers instead of steel. We crossed three rivers on the ice and after travelling a thousand miles our car was again side tracked at Irkutsk pending a confirming telegram from Moscow. We were told that it should be along in about two days but we had to wait exactly three months before we were again permitted to proceed but it was west to Moscow instead of east as we had hoped. During the three months in Irkutsk our car naturally did a lot of switching about the yard and we were much indebted to a little dog that we adopted, for keeping track of it. If our car had been moved while we were on a trip to the town, we could depend that little "Nimnoshka" would be waiting on the station platform to guide us back to the new location of our rolling home. The first two thousand miles of our return trip was very slow and we passed much of the derelict rolling stock that had been left six months previously. We visited several railway shops but saw no real attempt to get the work out. They were lucky to do the necessary maintenance on the engines they were using. Between three depots I counted eighty-five dead engines on the side tracks. Many of them were Baldwins or American locomotives, almost new and probably requiring only some trifling repair. In their incessant cry for charity it is always locomotives that the Soviet Government asks for. It is estimated from figures supplied by the Soviet Government that there are about fifteen thousand bad-order locomotives in Russia. This amounts to a decraese of about seventy-five percent in their effective power. They also admit that the serviceable rolling stock has decreased by

about seventy percent. In addition they say that over one thousand locomotives are idle from lack of fuel. In this connection I should add that they burn wood almost exclusively in their engines, now that they have neglected heir coal mines. It is also indicative of the energy of the government that in the winter of 1919 it was necessary to destroy ten thousand wooden houses in Petrograd in order to supply fuel for the rest of the city—and this in a country that is one of the wealthiest in coal and standing timber.

In connecion with the loss in rolling stock it should be noted that thousands of box cars are used all along the line as *dwellings* by the countless refugees. Thousands of families have lived thus for years and it is a very common thing to see many yard tracks full of cars in which windows have been cut and which have the family laundry stretched out between masts erected from the car roofs. Despite this diminution of sevetny percent in serviceable freight cars, there are still available infinitely more than the industry of the country requires. In the Volga region it was a common sight to see grass growing on the tracks at the entrance to grain elevators. This was because no grain was being shipped, because no grain was being grown, by the peasants who knew that the government would claim it as nationalized property because that was the law; "Because I made it so" Said Lenin. It is very obvious that a country that does not mine any coal or manufacture any commodities or encourage any enterprise; also does not have much use for box cares. It is a case where cause and effect are very difficult to disentangle. The first thing one notices upon entering the outskirts of Moscow is that every available side track is full of derelict rolling stock. Also, no one could fail to notice the very many factoriy chimneys, none of which were smoking. The station in Moscow is still in the incompleted state that it was left in 1914 when war was first declared. The scaffolds are still as they were erected to finish the interior of the waiting room. In fact one might safely say that very little actual improvements have been attempted since then and very little of the necessary maintenance.

Before leaving Omsk, on our westward trip, we were secretly advised that it would be a good idea to take some salt with us. It could be traded to the peasants for food en route. Although salt was very plentiful in Siberia—who has not heard of the Siberian salt mines?—there was a great scarcity of it in European Russia, and the government declared it contraband. tI was illegal to buy or sell,

but the government made no effort to supply this very necessary commodity although trains were entering Moscow every few days. The fact that the Commandant of our guard had several hundred pounds of salt with him prompted us to take some also. Personally I had about a bucket full. After we crossed the Urals I traded a basin full to a peasant woman for a cup full of wild strawberries. Later I found I could get almost a basinful of berries for a cup full of salt. When we arrived in Moscow I sold the remainder of my salt for forty thousand roubles. We were all short of money, and one of the party offered me a cheque on London for five pounds sterling for twenty-five thousand roubles. I then went up town and traded the other fifteen thousand roubles to a peasant woman for six apples.

The next day we were taken through the city and told that we were en route to the Petrograd Railway station, and that we should soon be home in England. Before reaching the station, however, we were put into prison for three months, and by that time the winter had set in again. When we were finally released we were started on the two days' journey to Petrograd in box cars, and without any issue of food rations. In Petrograd we were permitted to see the city, including the Winter Palace. While viewing the former sitting-room of the former Czars of all the former Russias it was with a thought for that family which was murdered in far Siberia. And they were only one of the countless families broken up by Bolshevism.

Now Gentlemen, I have touched very briefly and in quite a random manner, upon some of the conditions that go to make up the almost incredible difficulties under which the Russian people live. I shall be very pleased to deal more fully with any detail in which you may be interested, whether pertaining to the Railways of Russia or to any other phase of the very interesting situation there under the present government.

Chairman:

It is only a little after ten, so we have time for some questions.

A Member:

I should like to ask if either Lenin or Trotsky at any time had an organization, politically or economically, in Russia. Did they attempt to organize the country or did they simply allow things to drift?

Mr. E. A. MacMillan:

I should like to state that one thing which the Soviet

Government has done under Lenin and Trotsky—one of the very few things with which I can credit them, is that they have created a certain amount of order. They have attempted a certain amount of organization and have stabilized affairs to a considerable degree in Russia. I speak in terms of what order was in Russia at the best of times. They have organized things so that instead of being a dictatorship by the proletariat—to use their own words—there is a dictatorship to the proletariat and everyone else. They have instituted themselves autocrats in the most violent, radical sense. There is no democracy in any sense of the word. The individual is not permitted to think for himself. Lenin and Trotsky and their colleagues who form the ministry of the Soviet Government are absolute and have organized one of the greatest systems of internal secret police in existence. They have what they call the Chechka, which is the pet name for the National Institution for the suppression of Counter Revolutionary propaganda. It means that if any man is arrested on suspicion in any part of Russia, he is searched, all the papers and addresses are seized, and all the addresses in every part of Russia are communicated with through the agency at that place. They in turn are all arrested, and all their friends are put into prison, so that it is an insidious system that permeates the whole country, and thousands are in jail without any just cause, without trial and without sentence. They are put there because they had a relative who knew someone who had a friend who was favorable to the old regime. If a man is shot for any reason it is stated as Counter-Revolutionary Activity. I might say that the mandate for life or death is given for political patronage. If one has sufficient pull he can get a little slip of paper permitting him to shoot whom he pleases without trial and without responsibility. That is very convenient as a means of clearing up private debts. I might say that they have a wonderful organization, and if the energy they now give to consolidating their own position, were only expended on industry and on the operation of the country, and for the promotion of the welfare of their people, they would have a wonderful country; the very wonderful country that Russia must eventually become.

A Member:

Might I ask the lecturer if he considers there is any hope of salvation for Russia, under the present regime?—No doubt that is a tall question.

Mr. E. A. MacMillan:

Yes, it is a tall question. But it can be answered by Yes or No just the same. Yes, I think there is hope for the salvation of Russia. That hope, I think, lies in the gradual change which I believe will come in the present regime. As much as I detest and abhor the Soviet Governmnt, and ridicule the false premises on which it is built, and deplore the calamities they have brought to the country, I will say that having sustained themselves this long, I doubt if there will now be any counter-revolution which will upset them. They have created a certain amount of order. There are comparatively few poeple murdered on the streets or robbed. It has been made a capital offence to attempt highway robbery. In fact, most of the crimes are by the government rather than against the government. I believe that there will be a slow transition in their system of government, and that they will gradually drop some of the more radical planks in their platform. They will be forced to drop communism, which it is reported they are now doing. It is a matter of statistics that there are more Communists in New York than there are in Russia. Capitalism will return. Lenin, in his desire to kill all the capitalists forgot that the peasants are the greatest capitalists of the lot. They are coming to recognize the necessity of industry and the fact that industry is best promoted by individual incentive and effort. I think it would be very unfortunate in view of the conditions already in Russia, if there were another revolution now. It would only add absolute disaster to the existing chaos. I would rather see a slow change in the existing government, rotten as it is, than another great attempt at tearing down and rebuilding.

Chairman:

Mr. MacMillan, did you see any motion pictures while in Russia??

Mr. E. A. MacMillan:

Yes, in Russia I saw a lot of moving pictures. Most of them were used for propaganda purposes by the government, and in this respect they went to great length to develop the system. They had special propaganda trains made up. One enormous car would be devoted to the printing of literature and the socialistic and revolutionary tracts for distribution to the populace. Another car on this train would be the moving picture car. The outside of each car would be painted, decorated and cartooned favor-

able to the "government of workmen and peasants." The train would stop at each station for several days, and would give free entertainments in the evenings. The screen would be erected at the convenient distance from the car, and these pictures would frequently be dramas which were written and portrayed from the socialist standpoint, i.e., the villain would be a capitalist and the hero would be the poor down-trodden worker. In addition there are several picture theatres in most of the towns. The theatre seems to be one of the very few institutions which have survived the Bolshevik government.

A Member:

What were the rumors connected with the murder of the Imperial Family?

Mr. E. A. MacMillan:

If you do not mind I shall not say much about the rumors, because there were too many of them, and there is too little time. However, I will give some of what I believe to be the facts connected with the murder of the Imprial Family. In view of the many rumors during the time of Kolchak, the Allies appointed a Commission to investigate the situation and obtain what truth they could. Their findings and verdict, which was accepted as official by the various Allied governments, including the British Foreign Office, was that the Czar and his family, together with several servants, were transferred from Czarskoe Seloe during the Kerensky regime, to Nikolsk. There were several attempts made to take them out of the country, but owing to the very unsettled state of the provisional government it was impossible to reach a decision as to what should be done with them. The growing power of the Bolshevik party meant the decreasing safety of the Czar and his family. Eventually they were transferred to Ekaterinburg on the Ural mountains, and placed in a house formerly occupied by M. Epatief. They were heavily guarded by Russian soldiers, recruited from the same locality. Later the Commandant of the guard was changed, and he dismissed the Russian guard and substituted Lettish soldiers. On the night of July 18th, 1918, the Commandant of the guard summoned the whole family into the basement under the pretense of protection against the advancing Czechs. A firing party was then called in and the whole retinue was murdered where they stood. The Czar, the Czarina, the Czaravitch, the Grand Duchesses Olga, Tatiana, Marie and

Anatasia and two servants were killed almost instantly. One of the Grand Duchesses who survived the first onslaught, was killed by revolver fire at the hands of the commandant himself. The bodies were then loaded on a motor truck and taken into the woods, where they were burned with sulphuric acid,—much of it was used in Ekaterinburg for the reduction of platinum—the debris was then dumped down a nearby mine shaft into which a false bottom was fitted. The next day it was published in the Moscow papers that it was found necessary to execute the Czar—after a fair trial—but that his family had been taken to a place of safety. There is absolutely no doubt whatever about the facts, as all the evidence was perfectly clear. The murder was carried out at the instigation of the Bolshevik Minister, Sverdlov, who sent the necessary telegrams from Moscow, following instructions from his government.

A Member:

We read in several of our papers about the Nationalization of the Children. Is this done throughout Russia or only in the cities? I refer to where the children are supposed to be taken from their parents and sent to classes where they are inculcated with the ideas of sovietism.

Mr. E. A. MacMillan:

The practice is carried out generally only in the cities. The children have been nationalized to the extent that they are the property of the state. The parents have the custody of them until they are sixteen, but during the interval, in addition to their ordinary school, they must spend their evenings in a Bolshevik club, where they have the theories of Bolshevism instilled into their minds like a religion.

Chairman:

If there are no more questions, I am sure I have your permission to thank Mr. MacMillan heartily for his lecture this evening.

Mr. E. A. MacMillan:

I must say you have paid me the compliment of listening very attentively to my talk, which has been rather less interesting than I should like to have made it. I thank you very much.

Chairman:

At our January meeting we are to have a paper entitled "Prevention of Freight Loss and Damage," by a representative of the American Railway Association.

We will now adjourn.

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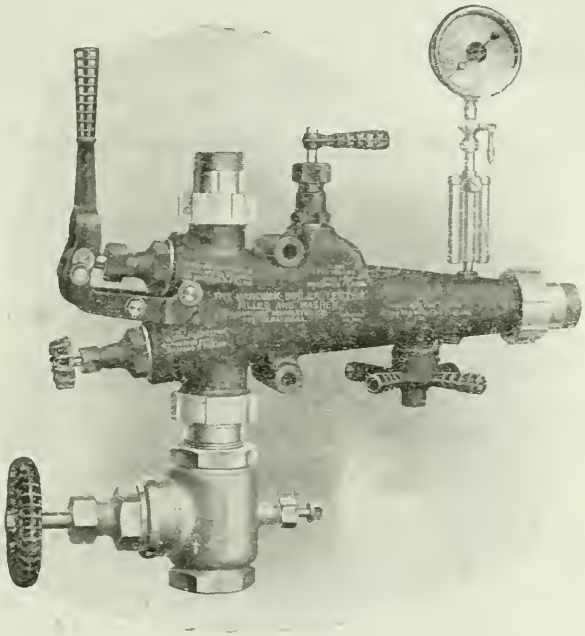

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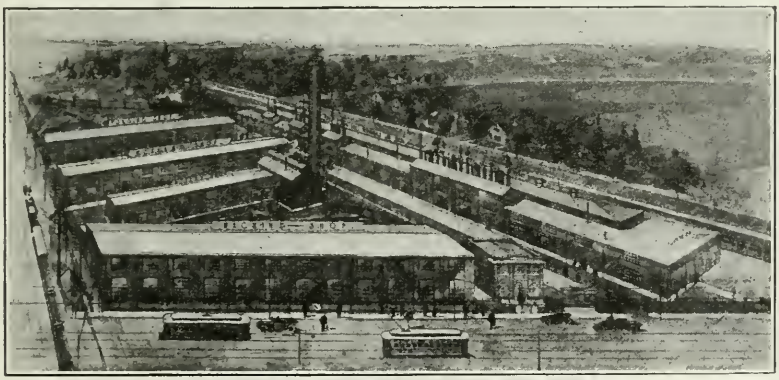

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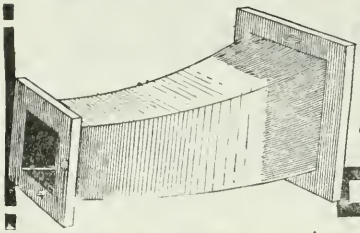

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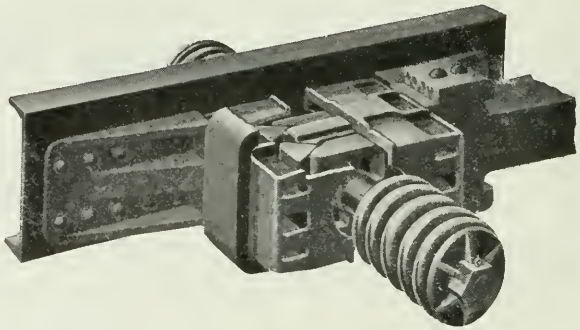

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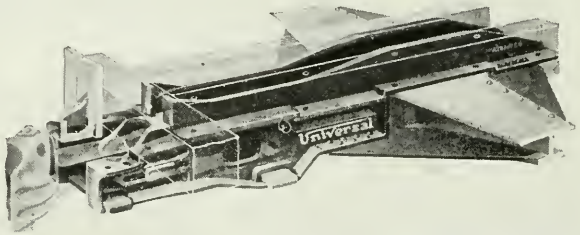

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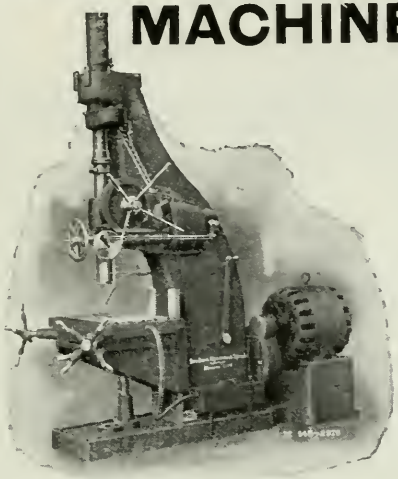

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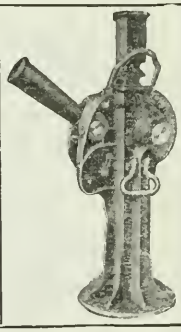

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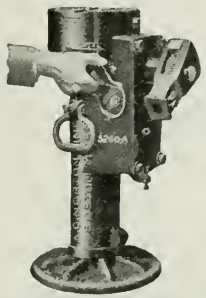

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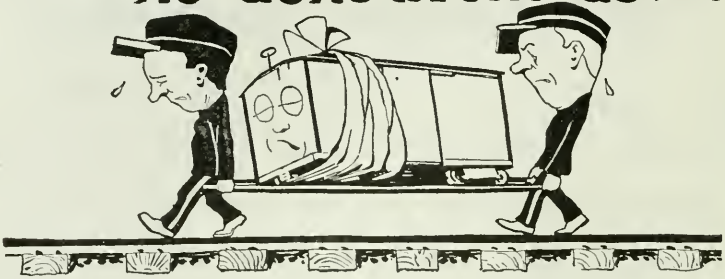

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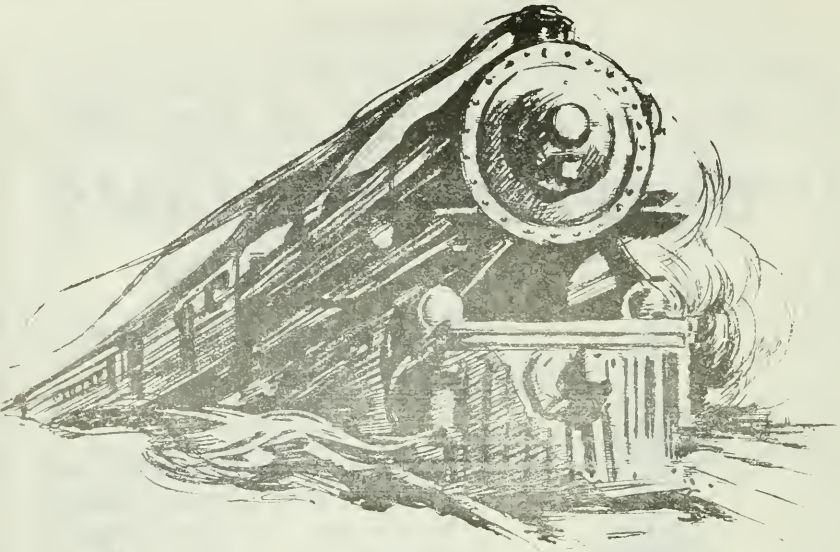

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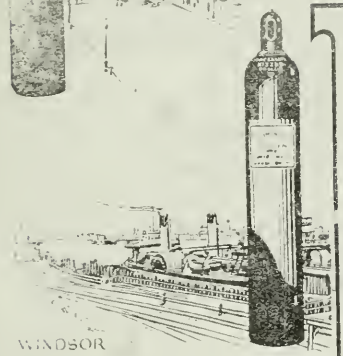

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